

EXHIBIT 9

Unit Converter

 Unit Converter

Convert from:

Field:

viscosity (dynamic)

Unit:

mPa s

Value:

150 mPa s

Convert to:

Significant Digits:

4

Unit:

cP

Value:

150.0 cP

Click the Convert button below to display the value.

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Dynamic or Absolute Viscosity Converting Chart

An absolute or dynamic viscosity converting chart for units like Poiseuille - Poise - centipoise and more

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The viscosity of a fluid is an important property in the analysis of liquid behavior and fluid motion near solid boundaries.

The viscosity of a fluid is its resistance to shear or flow and is a measure of the adhesive/cohesive or frictional properties of a fluid. The resistance is caused by intermolecular friction exerted when layers of fluids attempts to slide by an other.

A Dynamic or Absolute Viscosity Units Converting Table

The table below can be used to convert between common dynamic or absolute viscosity units.

Multiply by	Convert to					
Convert from	Poiseuille (Pa s)	Poise (dyne s / cm ²)	Poise = g / cm s	centipoise	kg / m h	kg f s / m ²
Poiseuille (Pa s)	1	10	10 ³	10 ³	3.63 10 ³	0.102
Poise (kg / m h)	0.001	0.01	1	1	3.6	0.0012
centipoise = g / cm s	2.78 10 ⁻⁴	0.00278	0.0278	0.0278	1	2.83 10 ⁻⁵
kg f s / m ²	9.81	98.1	9.81 10 ³	9.81 10 ³	3.53 10 ⁴	1
lb _f s / inch ²	6.89 10 ³	6.89 10 ⁴	6.89 10 ⁶	6.89 10 ⁶	2.48 10 ⁷	703
lb _f s / ft ²	47.9	479	4.79 10 ⁴	4.79 10 ⁴	1.72 10 ⁵	0.0488
lb _f h / ft ²	1.72 10 ⁵	1.72 10 ⁶	1.72 10 ⁸	1.72 10 ⁸	6.21 10 ⁸	1.76 10 ⁴

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Multiply by	Convert to				
Convert from	lb _f s / inch ²	lb _f s / ft ²	lb _f h / ft ²	lb / ft s	lb / ft h
Poiseuille (Pa s)	1.45 10 ⁻⁴	0.00413	0.413	1.49	4.22 10 ⁻⁵
Poise (dyne s / cm ²)	1.45 10 ⁻⁵	0.00209	5.8 10 ⁻⁷	0.0672	242
\bar{g} / (cm s)					
centipoise	1.45 10 ⁻⁷	2.9 10 ⁻⁵	5.8 10 ⁻⁹	0.000672	2.42
kg / m h	4.03 10 ⁻⁸	5.8 10 ⁻⁶	1.61 10 ⁻⁹	0.000187	0.672
kg _f s / m ²	0.00142	20.5	5.69 10 ⁻⁵	6.59	2.37 10 ⁴
lb _f s / inch ²	1	144	0.04	4.63 10 ³	1.67 10 ⁷
lb _f s / ft ²	0.00694	1	0.000278	32.2	1.16 10 ⁵
lb _f h / ft ²	25	3.6 10 ³	1	1.16 10 ⁵	4.17 10 ⁸
lb / ft s	0.000216	0.0311	8.63 10 ⁻⁶	1	3.6 10 ³
lb / ft h	8 10 ⁻⁸	1.16 10 ⁵	2.4 10 ⁻⁹	0.000278	1

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- **Fluid Flowmeters** Flow metering basics. Introduction to Orifice, Venturi, Flow Nozzles, Pitot Tubes, Target, Variable Area, Positive Displacement, Turbine, Vortex, Electromagnetic, Ultrasonic Doppler, Ultrasonic Time-of-travel, Mass Coriolis, Mass Thermal, Weir V-notch, Flume Parshall and Sluice Gate flow meters.

Related Documents

- Dynamic, Absolute and Kinematic Viscosity An introduction to dynamic, absolute and kinematic viscosity and how to convert between CentiStokes (cSt), Centipoises (cP), Saybolt Universal Seconds (SSU), degree Engler and more.
- Viscosity Converting Chart A converting table between viscosity units as Centipoises, milliPascal, CentiStokes and SSU
- Online Absolute or Dynamic Viscosity Converter Convert between dynamic or absolute viscosity units - Poiseuille, Poise, centPoise and more

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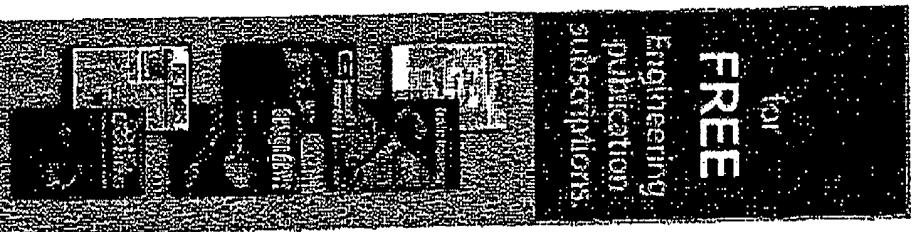
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Temperature



Dynamic or Absolute Viscosity Converting Chart

°C
 °F

Length
 m

km
 in
 ft
 yards
 miles
 nautical miles

Volume
 m³
 liters
 in³
 ft³
 us gal

Velocity
 m/s
 km/h
 ft/min
 ft/s
 mph
 knots

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- bar
- mmH₂O
- kg/cm²
- psi
- inches H₂O



Unit Converter

Flow
1

1

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